

عنوان مقاله:

Effect of energetic electrons on dynamic motion of ion-acoustic waves in the presence of external periodic force

محل انتشار:

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نویسنده:

Mostafa Mehdipoor - Department of Physics, Faculty of Science, Gonbad Kavous University, Gonbad Kavous, Iran

خلاصه مقاله:

The dynamic motions of ion-acoustic (IA) waves in plasma are studied by considering the Kappa-Cairns electron distribution. The effect of external periodic force is also considered, here. Using the reductive perturbation technique, a Korteweg-de Vries (K-dV) equation is obtained. The quasiperiodic motions of IA waves are investigated by considering two-dimensional phase portraits and time-series analysis. The effects of non-thermal parameters (i.e.,  $\kappa$ ,  $\alpha$ ) and the strength ( $f_0$ ) of the external periodic force on nonlinear travelling wave structures are also discussed

کلمات کلیدی:

Ion-acoustic waves, dynamic motions, external periodic force, energetic electrons

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